APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/421,846	10/20/1999	JEAN-MARC ANDREOLI	R/97005Q	4669

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EXAMINER
BASHORE, WILLIAM L

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/421,846	ANDREOLI ET AL.
	Examiner	**Art Unit**	
	William L. Bashore	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 January 2003</u> .

2a)☐ This action is **FINAL.**　　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-16</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All b)☐ Some * c)☐ None of:

　　　1.☒ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a)☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)　　　　　　　4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)　5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .　6)☐ Other: .

DETAILED ACTION

1.   This action is responsive to communications: RCE filed 1/24/2003, to the original application filed

10/20/1999, with a foreign priority filing date of **4/23/1997**. IDS filed 10/19/2000.

2.   The Specification remains objected to as failing to provide proper antecedent basis for the

claimed subject matter.

3.   Claims 1-16 remain rejected under 35 U.S.C. 112, first paragraph as containing subject matter which

was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or

with which it is most nearly connected, to make and/or use the invention.

4.   Claims 1-5, 8, 13-16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over

Rubinstein '233, and Wilson.

5.   Claims 6-7 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein '233,

Wilson, and Karnik.

6.   Claims 9-12 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein '233,

Wilson, and Rubinstein '897.

7.   Claims 1-16 are pending. Claims 1, 13 are independent claims.

Continued Examination Under 37 CFR 1.114

8.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e),

was filed in this application after final rejection. Since this application is eligible for continued examination

under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous

Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/24/2003 has

been entered.

Specification

9.   The specification is objected to as failing to provide proper antecedent basis for the claimed

subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Applicant appears to be disclosing a method of obtaining document constraint descriptors from

analysis of logical relations equivalent to received attribute-value relations. However, Applicant's

disclosure is insufficient to teach one skilled in the pertinent art a method of making and using Applicant's

invention without undo experimentation. In addition, the Examiner cannot find any disclosure regarding

a specific example (from start to finish) of Applicant's invention within said disclosure. It is noted that

a substantial portion of said disclosure describes known processes (i.e. "Knowledge Brokers, and Feature

Constraints"). Although informative, the distinction between said descriptions and what Applicant

specifically describes as his/her invention is unclear. Applicant is advised against the addition of new matter.

Claim Rejections - 35 USC § 112

10.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using
> it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with
> which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the
> inventor of carrying out his invention.

11.   **Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which**

was not described in the specification in such a way as to enable one skilled in the art to which it pertains,

or with which it is most nearly connected, to make and/or use the invention.

12.   **In regard to independent claims 1, 13,** the limitations of obtaining document constraint

descriptors from analysis of logical relations equivalent to received attribute-value relations, including sorts and

features, are not enabled in the specification (see also objection above). Applicant is advised against the

addition of new matter.

13.   **In regard to dependent claims 2-12, 14-16,** claims 2-12, 14-16 are rejected for fully

incorporating the deficiencies of their respective base claims.

Examiner's Note

14.   The following rejections are based upon the Examiner's possible interpretation of obtaining document

constraint descriptors from analysis of logical relations equivalent to received attribute-value relations, as

constraints drawn from user combinations of searchable keywords forming logical relations including

feature constraints, and sorting of results.

Claim Rejections - 35 USC § 103

15.   **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness**

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102
> of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the
> art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was
> made.

16.   **Claims 1-5, 8, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein**

(hereinafter Rubinstein '233), U.S. Patent No. 5,794, 233 issued August 1998, in view of Wilson et al.

(hereinafter Wilson), U.S. Patent No. 5,963,938 issued October 1999.

In regard to independent claim 1, Rubinstein '233 teaches:

Obtaining document constraint descriptors via logical combinations of keywords searchable

in documents (Rubinstein '233 Abstract, Figure 2 item 250; compare with claim 1 "*A method for obtaining*

document constraint descriptors....the method comprising").

Attribute values as disclosed by relevance codes associated with keywords, said codes ranking the

importance of each keyword, with said keywords used in forming logical relation queries for searching

documents (Rubinstein '233 Figure 2 item 206, 208, 250, column 3 lines 34-44, column 4 lines 4-10; compare

with claim 1 "*receiving ....attribute -value relations that can apply to documents*").

Obtaining logical relations via inclusion of keywords into logic panes to produce logically joined

expressions (Rubinstein '233 Figure 2 item 242, 246, column 4 lines 17-30; compare with claim 1 "*using....to*

obtain logical relations equivalent to the attribute-value relations").

Using said logically joined expressions to obtain a displayed constraint descriptor set as applied for

document searching (Rubinstein '233 Figure 2 item 250, column 4 lines 49-56; compare with claim 1 "*using the*

logical relations to obtain a document constraint descriptor defining a set of one or more constraints equivalent

to the logical relations.").

The limitation of user signals would have been obvious to one of ordinary skill in the art at the time of

the invention, in view of Rubinstein '233, because Rubinstein '233 teaches keyword selection using "drag and

drop" (Rubinstein '233 column 4 lines 10-16), as well as input fields for entering data (Rubinstein '233 Figure 2

items 215, 250), which suggests user signals, providing Rubinstein '233 the capability and advantage of user

interactivity (compare with claim 1 "*user signals*").

Rubinstein'233 teaches a query input indicative of a logical relation and a feature (Rubinstein'233

Figure 2 item 250; compare with claim 1 "*a feature*"). Rubinstein'233 does not specifically teach a sort.

However, Wilson teaches selection of arguments, operations, and relations, said logical function may be sorting,

or other operation (Wilson column 3 lines 45-55; compare with claim 1 "*one of a sort*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Wilson to Rubinstein'233, providing Rubinstein'233 the benefit of incorporating sorts for convenient arrangement of related/ranked results.

Rubinstein'233 does not specifically teach obtaining descriptors and logical relations without requiring user intervention. However, Wilson teaches a query interface encompassing Boolean operators for relating logical operations. Subsequent to user signals (a user changing an operator), Wilson automatically (without user intervention) makes necessary changes and divisions in Boolean groupings within relations, resulting in proper constraints (Wilson column 7 lines 12-21, column 12 lines 34-48; compare with claim 1 "*without requiring user intervention*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Wilson to Rubinstein.233, providing Rubinstein'233 the benefit of automatic modification of relations to match user changes, which releases the burden of modification from the user.

In regard to dependent claim 2, Rubinstein '233 teaches a cursor control device, as well as a mouse and keyboard for a user to use in order to create logical relations (Rubinstein '233 Figure 4 item 406, column 7 lines 55-60; compare with claim 2).

In regard to dependent claims 3, 4, 5, Rubinstein '233 teaches a computer with a cursor control device, as well as a mouse and keyboard for a user to use in order to create logical relations (Rubinstein '233 Figure Figure 4 item 406, column 7 lines 55-60; compare with claims 3, 4, 5).

In regard to dependent claim 8, Rubinstein '233 teaches presenting a graphical user interface image allowing a user to create a logical query, said image including presentation of a document constraint descriptor

(Rubinstein '233 Figure 2 item 200, 250; compare with claim 8). In addition, Rubinstein '233 teaches a

computer with RAM memory for storing data (Rubinstein '233 column 7 lines 49-53).

In regard to independent claim 13, Rubinstein '233 teaches:

Obtaining document constraint descriptors via logical combinations of keywords searchable

in documents (Rubinstein '233 Abstract, Figure 2 item 250; compare with claim 13 *"A machine for obtaining*

document constraint descriptors....the machine comprising").

A processor, and a graphical user interface (Rubinstein '233 column 7 lines 41-48, Figure 2,3; compare

with claim 13 *"a processor; and user interface circuitry for providing user signals to the processor"*).

Attribute values as disclosed by relevance codes associated with keywords, said codes ranking the

importance of each keyword, with said keywords used in forming logical relation queries for searching

documents (Rubinstein '233 Figure 2 item 206, 208, 250, column 3 lines 34-44, column 4 lines 4-10; compare

with claim 13 *"receiving ....attribute -value relations that can apply to documents"*).

Obtaining logical relations via inclusion of keywords into logic panes to produce logically joined

expressions (Rubinstein '233 Figure 2 item 242, 246, column 4 lines 17-30; compare with claim 13 *"using....*

logical relations equivalent to the attribute-value relations").

Using said logically joined expressions to obtain a displayed constraint descriptor set as applied for

document searching (Rubinstein '233 Figure 2 item 250, column 4 lines 49-56; compare with claim 13 *"using*

the logical relations.... a document constraint descriptor defining a set of one or more constraints equivalent to

the logical relations.").

Rubinstein'233 teaches a query input indicative of a logical relation and a feature (Rubinstein'233

Figure 2 item 250; compare with claim 13 *"a feature"*). Rubinstein'233 does not specifically teach a sort.

However, Wilson teaches selection of arguments, operations, and relations, said logical function may be sorting,

or other operation (Wilson column 3 lines 45-55; compare with claim 13 *"one of a sort"*). It would have been

obvious to one of ordinary skill in the art at the time of the invention to apply Wilson to Rubinstein'233, providing Rubinstein'233 the benefit of incorporating sorts for convenient arrangement of related/ranked results.

The limitation of user signals would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Rubinstein '233, because Rubinstein '233 teaches keyword selection using "drag and drop" (Rubinstein '233 column 4 lines 10-16), as well as input fields for entering data (Rubinstein '233 Figure 2 items 215, 250), clearly suggest user signals, providing Rubinstein '233 the capability and advantage of user interactivity (compare with claim 13 "*user signals*").

Rubinstein'233 does not specifically teach obtaining descriptors and logical relations without requiring user intervention. However, Wilson teaches a query interface encompassing Boolean operators for relating logical operations. Subsequent to user signals (a user changing an operator), Wilson automatically (without user intervention) makes necessary changes and divisions in Boolean groupings within relations, resulting in proper constraints (Wilson column 7 lines 12-21, column 12 lines 34-48; compare with claim 13 "*without requiring user intervention*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Wilson to Rubinstein.233, providing Rubinstein'233 the benefit of automatic modification of relations to match user changes, which releases the burden of modification from the user.

In regard to dependent claim 14, Rubinstein '233 teaches a general purpose microcomputer (Rubinstein '233 column 7 lines 41-43; compare with claim 14).

In regard to dependent claims 15, 16, Rubinstein '233 teaches creation of a logical relation query, resulting in a subset of returned documents (Rubinstein Abstract, column 5 lines 54-61; compare with claim 15

Rubinstein '233 teaches presenting a graphical user interface image allowing a user to create a logical query, said image including presentation of a document constraint descriptor, said image also including a

document file with a displayed portion (Rubinstein '233 Figure 2 item 200, 221, 250, 270; compare with claim 16).

17.   **Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein '233, and Wilson as applied to claim 1 above, and further in view of Karnik, U.S. Patent No. 5,404,294 issued April 1995.**

    In regard to dependent claims 6-7, Rubinstein '233 does not specifically teach input of a medium (i.e. paper form) via scanner, said medium containing printed values filled in by a user, wherein said values are subsequently read and analyzed. However, Karnik teaches a human readable pre-printed IRS form with values filled in by a user. The form is scanned, the values are read, and a mathematical formula is applied to certain inputted values (Karnik Figure 5, column 1 lines 53-57, 64-67, column 3 lines 60-64, column 6 lines 8-17; compare with claims 6-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Karnik to Rubinstein '233, providing Rubinstein '233 the capability of querying data from inputted IRS forms for statistical purposes.

18.   **Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rubinstein '233, and Wilson as applied to claim 1 above, and further in view of Rubinstein (hereinafter Rubinstein '897), U.S. Patent No. 5,721,897 issued February 1998.**

    In regard to dependent claim 9, Rubinstein '233 does not specifically teach a network. However, Rubinstein '897 teaches creating logical relations utilizing the Internet, which is indicative of a network (Rubinstein '897 column 12 lines 40-47; compare with claim 9). It would have been obvious to on of ordinary

skill in the art at the time of the invention to apply Rubinstein '897 to Rubinstein '233, providing Rubinstein

'233 the capability of gathering data and communication with a plurality of users during a session.

In regard to dependent claims 10-12, Rubinstein '233 teaches presenting a graphical user interface

image allowing a user to create a logical query, said image including presentation of a document constraint

descriptor, said image including document references, portions of are displayed. Rubinstein '233 also teaches a

printer (Rubinstein '233 Figure 2 item 200, 221,250, 270, column 8 lines 1-3; compare with claims 10-12).

Response to Arguments

19.   Applicant's arguments filed 1/24/2003 have been fully and carefully considered but they are not

persuasive.

Applicant argues on pages 3-4 of the amendment that Applicant's specification (in particular, pages 27-

37, Figures 3-10 and corresponding descriptions in said specification) sufficiently teaches one skilled in the art a

method of making and using Applicant's claimed invention without undo experimentation. The examiner

respectfully disagrees. It is respectfully submitted that the examiner cannot find a specific example of

Applicant's invention in the specification. A mere description of the figures does not, by itself, disclose

Applicant's invention.

As was discussed in the previous office action mailed 10/24/2002, pages 10-11), the examiner

respectfully notes that the disclosure is insufficient because it is unclear what Applicant's invention is. The

disclosure is replete with references and descriptions of prior art and known methods. The distinction between

these references/descriptions, and what Applicant describes as his/her invention is unclear, rendering it difficult

for one of ordinary skill in the art to recreate Applicant's invention without undo experimentation, using the

specification as a guide. The examiner cannot find a specific example, from start to finish, of Applicant's invention in the specification (see also said previous office action mailed 10/24/2002).

Applicant argues on page 4 of the amendment that support for claimed *"one of a sort and a feature"* can be found in specification page 19 line 21 to page 20 line 6. The examiner respectfully notes that the rejection of claims 1-16 under 35 U.S.C. 112 first paragraph are based upon non-enablement of the claims in the specification, as defined by the examiner's objection set forth above. It is respectfully submitted that the subject matter cited (obtaining document constraint descriptors from analysis of logical relations equivalent to received attribute-value relations, including sorts and features) does not appear to be described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, as defined by the combined limitations of the instant claims.

Applicant argues on pages 4-5 of the amendment that Rubinstein'233, Wilson, and Rubinstein'897 do not specifically teach the instant claimed limitations. The examiner respectfully notes that Rubinstein'233 teaches a user constructing a Boolean based query, with attribute values as disclosed by relevance codes associated with keywords, and formation of logical relation queries. Wilson teaches automatic modification of Boolean relations so as to coincide with user modification of input (subsequent to a user modifying a query, new Boolean groupings are divided/formed automatically without user intervention). This teaching is applied to Rubinstein'233 to teach the limitation *"without requiring user intervention"*.

Conclusion

20.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bashore whose telephone number is **(703) 308-5807**. The examiner can normally be reached on Monday through Friday from 11:30 AM to 8:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on **(703) 308-5186**.

Any inquiry of a general nature or relating to the status of this application should be directed to the

Group receptionist whose telephone number is **(703) 305-3900.**

21.   **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7239 (for formal communications intended for entry)
or:
(703) 746-7240 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")
or:
(703) 746-7238 (for after-final communications)

**Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Fourth Floor (Receptionist).**

William L. Bashore
April 2, 2003

STEPHEN S. HONG
PRIMARY EXAMINER